XXIX .- Description of Rhopalodina, a new form of Echinodermata. By J. E. GRAY, Ph.D., F.R.S., V.P.Z.S. &c.

Among the specimens collected by the late Mr. Cranch during Captain Tuckey's Congo Expedition, is the case of a very curious animal which has been erroneously placed among the Worms. By the label on the bottle it was taken on the "22nd of May." After examining the specimen I feel convinced that it is a Radiated animal most nearly allied to Siphunculus, and probably forms the type of a new family intermediate between that genus and Holothuria. Unfortunately the whole of the internal organs appear to be destroyed, either by the weakness of the spirit, or their expulsion by the contraction of the organs at the time of death; for when the specimen was first examined, the sides of the body were closely compressed against each other, leaving no internal cavity, and giving the specimen the form of a spoon with a roundish bowl and a slender tapering blunt handle; but when carefully examined it showed that its proper form was ovate, rather compressed, with a slight keel on each side.

It may be described thus:-

RHOPALODINA.

Animal elongate, clavate, rigid, rather brittle, covered with imbedded hard calcareous plates having the appearance of rugose spinulose scales, the imbricate edge being directed towards the aperture; the scales of the dilated lower part of the body large, and those on the narrow tubular part very small and close, being most distinctly visible round the edge of the oral aperture. When examined under the microscope the surface appears to be formed of very numerous small circular imbedded plates, and scattered with rather distant transparent rugulose spines.

The upper part near the mouth is cylindrical and tubular and more rigid, very gradually and slightly enlarging towards the end, where it rather suddenly dilates into an ovate, somewhat compressed body, with a slight keel on each of the two edges. The parietes of the body are thinner and less rigid than that of the tube. The hinder half of the dilated body is furnished with ten bands or ambulacra, each formed of two series of thin tentacles, supported or defended by transparent rugulose spines, which regularly diverge from the centre of the hinder end of the body. They are more like the ambulacra of the



Rhopalodina lageniformis.

Holothuriæ than those of the Sea Egg or Echina, for I cannot discover any regular perforations, such as are found in the ambulacra of the latter animals. They end abruptly, but there is an obscurely marked rather darker line, which extends from their extremity a greater or less distance towards the upper part of the tube. The aperture of the tube is circular, and I cannot find any trace of a second opening to the alimentary canal.

The animal is $1\frac{9}{12}$ long; the dilated body $\frac{8}{12}$ long and $\frac{5}{12}$ wide, $\frac{4}{12}$ thick from side to side.

The only specimen known may be designated Rhopalodina

lageniformis.

In general external appearance it resembles a Siphunculus with a scaly covering like the scaly Holothuriæ, and with distinct ambulacra like those animals, but only covering the upper half of the club-shaped part of the body; but, unlike the Holothuriæ, which have the ambulacra limited to a part of the body, the part where these are situated is that which is the most convex. For the present I should be inclined to place it as the type of a new family between Holothuria and Siphunculus.

XXX.—Rambles in Ceylon. By Edgar Leopold Layard, Esq.

To Richard Taylor, Esq.

[Continued from p. 236.]

Allawattegodde, Top of Balacadua Pass, April 23, 1852.

My DEAR SIR, -- I resume my narrative from this place-so much of my way back to Jaffua. I closed my last letter at Allagamo on the night of Sunday the 13th, after which we pushed on vigorously and got into Kandy safe and sound, in spite of all the ill-omened prophecies with which we started; though, absurdly enough, while standing at the farrier's door, giving him instructions about shoeing the horse, the back-band of the harness gave way, and down we came: fortunately neither of us was hurt. B. left the next morning by the mail, and I heard from him by return that he had arrived just in time for the Bombay steamer. I managed to get over my business in Kandy in one day, and loving the jungle more than the town, I left by daylight the next (Saturday) and came on here, intending to halt for my Sunday. Here I have been ever since, for my horse, who has never been among the hills but once before, and is therefore quite unused to them, has been quite lame, and I but little better; however, we are both getting well, and my friend C. (at whose house I am stopping) and I go down the Pass tomorrow to Matelle, the scene of the late rebellion. I ride one of his horses, and poor old Baba takes the buggy down this evening. I have not been idle during my stay here;

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